



ಬೆಂಗಳೂರು ಮೆಟ್ರೋ ರೈಲ್ ನಿಗಮ ನಿಯಮಿತ

(ಸಹಭಾಗಿತ್ವದ - ಕರ್ನಾಟಕ ಸರ್ಕಾರ ಹಾಗೂ ಕೇಂದ್ರ ಸರ್ಕಾರ ಉದ್ಯಮ)
ನೋಂದಾಯಿತ ಕಛೇರಿ : ಬಿ.ಎಂ.ಟಿ.ಸಿ. ಕಾಂಪ್ಲೆಕ್ಸ್, 3ನೇ ಮಹಡಿ, ಕೆಂಗಲ್ ಹನುಮಂತಯ್ಯ ರಸ್ತೆ, ಶಾಂತಿನಗರ
ಬೆಂಗಳೂರು - 560 027, ಭಾರತ

Bangalore Metro Rail Corporation Ltd.

(A Joint Venture of Government of Karnataka & Government of India)

Regd. Office : B.M.T.C. Complex, 3rd Floor, K.H. Road, Shanthinagar,
Bangalore - 560 027. INDIA

No. BMRCL/GM/SEMUCP/2023-24/ 10577

Date: 04.10.2023

To,

Deputy Conservator of Forests
BBMP, Forest Wing,
N.R. Square, Bengaluru, Karnataka 560002

Sub: - Species Breakup List and Soil Report for Compensatory Plantation Plan in lieu of removal of trees between Agara to Ibbalur portal piers LHS/RHS service road area. (ORR-Phase-1 & Phase-3A works). Bengaluru.

Ref: - 1. BMRCL/GM/SEMUCP/2023-24/7990 dated: 19.08.2023

2. Official Memorandum No. DCF/PR259/2023-24 Dated 10.08.2023.

In addition to compensatory plantation plan for 2450 saplings plantation submitted on 19.08.2023, soil test report and species break up list are being submitted for your kind perusal.


(Divya S Hosur)
General Manager - SEMU/IT

ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ ಕಛೇರಿ
ಬಿ.ಎಂ.ಟಿ.ಸಿ. ಕಾಂಪ್ಲೆಕ್ಸ್, 3ನೇ ಮಹಡಿ, ಕೆಂಗಲ್ ಹನುಮಂತಯ್ಯ ರಸ್ತೆ, ಶಾಂತಿನಗರ ಪಾಲಿಕೆ
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**List of Tree species for Compensatory Plantation
Location : NPKL**

SI NO	Tree Species Name	Category	Quantity
1	Tamarind	Fruit	122
2	Jackfruit	Fruit	122
3	Indian Almond	Fruit	122
4	Indian Fig Tree	Fruit	122
5	Goosseberry Tree	Fruit	122
6	Hole dasavala	Flower	122
7	Hole matti	Wood	122
8	Kadamba mara	Flower & Wood	122
9	Mahogany	Wood	122
10	champaka mara	Flower	122
11	Ala	Wood & Fruit	122
12	Arali mara	Wood & Fruit	122
13	Atti mara	Wood & Fruit	122
14	Basari mara	Wood	122
15	Nerale mara	Fruit	122
16	Neem	Wood	122
17	Honge	Wood	122
18	Tare	Wood	122
19	Red Tamarend	wood	122
20	wild Mango	fruit	122
21	Sihi Hunase	wood	10
Total			2450

UNIVERSITY OF AGRICULTURAL SCIENCES GKVK, BANGALORE
DEPARTMENT OF SOIL SCIENCE AND AGRICULTURAL CHEMISTRY

SS&AC/ 804 /2021-22

11-10-2021

To,

✓ SHRI B. C. NATARAJA
✓ CHIEF ENGINEER (UG-1), BANGALORE METRO RAIL CORPORATION LTD.,
BMTc COMPLEX, 3rd FLOOR, K.H. ROAD,
SHANTINAGAR, BANGALORE- 560 027
GST NO. 29AAACB4881D1ZQ

Sir,

Sub: Analytical result of two soil samplesreg
Ref: DR/ STA/TT -169/ 2021-22 dt:-29-09-2021

Please find here with the analytical results of two soil samples provided by you for analysis in the Dept. of Soil Science and Agricultural Chemistry, College of Agriculture, GKVK, Bangalore-65

Soil samples

Parameters	Nadaprabhu Kempegowda Layout, No. 1 st Sub Division, BDA, Bengaluru	Nadaprabhu Kempegowda layout, No. 2 nd Sub Division, BDA, Bengaluru
pH (1:2.5)	5.79	6.13
Electrical conductivity (dS/m)(1: 2.5)	0.12	0.19
Organic carbon (%)	0.31	0.36
Nitrogen(kg ha ⁻¹)	238.48	250.61
Phosphorus (kg ha ⁻¹)	31.43	36.37
Potassium(kg ha ⁻¹)	153.50	168.50
Calcium (meq/100 g)	4.50	5.40
Magnesium (meq/100 g)	1.00	1.00
Sulphur (ppm)	16.47	19.82
Iron (ppm)	8.43	10.11
Manganese (ppm)	5.16	6.04
Zinc (ppm)	0.65	0.73
Copper (ppm)	0.27	0.31
Boron (ppm)	0.32	0.39

Inference: The two soil sample provided for analysis are acidic in nature, low organic carbon and available N, medium in P and K as per standards and all other parameters vary from medium to high ranges as per standards. Therefore with proper amendment application soil is suitable for translocation/ compensatory plantation.

The result should not be utilized for legal / commercial purposes without prior consent of the Director of Research.

Forwarded to
Director of Research

NO DR/STA/TT - 169/2021-22 Yours faithfully

dt: 13/10/21

COUNTERSIGNED

Professor and Head

Director of Research

University of Agricultural Sciences
Bangalore

UNIVERSITY OF AGRICULTURAL SCIENCES, BANGLORE
DEPARTMENT OF SOIL SCIENCE AND AGRICULTURAL CHEMISTRY
COLLEGE OF AGRICULTURE, GKVK CAMPUS

Soil and Irrigation Water Parameters Interpretation
Limits of Nutrients in Soil / ಮಣ್ಣಿನಲ್ಲಿನ ಪೋಷಕಾಂಶಗಳ ಮಿತಿಗಳು

Parameters				
pH	ರಸವಾರ	<6.5 ಹುಳಿ	6.5-8.5 ತಟಸ್ಥ	>8.5 ಕ್ಷಾರ
EC (dS/m)	ವಿದ್ಯುತ್ ವಾಹಕತ್ವ, ಡೆಸಿಸಿ, ಸೈಮನ/ಮೀ	<0.8 ಸಹಜ ಸ್ಥಿತಿ	0.8-1.6	>1.6-2.5 ಹಾನಿಕಾರಕ

Parameters		Low/ಕಡಿಮೆ	Medium/ಮಧ್ಯಮ	High/ಹೆಚ್ಚು
OC(Organic Carbon%)	ಸಾವಯವ ಇಂಗಾಲ (%)	<0.50	0.5 - 0.75	>0.75
Nitrogen (Kg ha ⁻¹)	ಸಾರಜನಕ (N) ಕೆ.ಜಿ./ಹೆ.	<280	280-560	>560
Phosphorus (Kg ha ⁻¹)	ರಂಜಕ (P ₂ O ₅) ಕೆ.ಜಿ./ಹೆ.	<22.9	22.9-56.33	>56.33
Potassium (Kg ha ⁻¹)	ಪೊಟ್ಯಾಶ್ (K ₂ O) ಕೆ.ಜಿ./ಹೆ.	<141	141-336	>336
Sulphur (ppm)/mg kg ⁻¹	ಗಂಧಕ(S) ಪಿ.ಪಿ.ಎಂ	<10	10-20	>20
Iron (ppm)/mg kg ⁻¹	ಕಬ್ಬಿಣ (Fe) ಪಿ.ಪಿ.ಎಂ	<2.50	2.50-4.50	>4.50
Manganese (ppm)/mg kg ⁻¹	ಮ್ಯಾಂಗನೀಸ್(Mn) ಪಿ.ಪಿ.ಎಂ	<1.00	1.00-2.00	>2.00
Copper (ppm)/mg kg ⁻¹	ತಾಮ್ರ(Cu) ಪಿ.ಪಿ.ಎಂ	<0.10	0.10-0.20	>0.20
Zinc (ppm)/mg kg ⁻¹	ಸತು(Zn) ಪಿ.ಪಿ.ಎಂ	<0.60	0.60-1.00	>1.00
Boron (ppm)/mg kg ⁻¹	ಬೋರಾನ್ (B) ಪಿ.ಪಿ.ಎಂ	<0.25	0.25-0.50	>0.50

Irrigation Water Quality Parameters/ ನೀರಾವರಿ ನೀರಿನ ಗುಣಮಟ್ಟ ವಿಯತಾಂಕ

Parameter	Low/ಕಡಿಮೆ	Medium/ಮಧ್ಯಮ	High/ಹೆಚ್ಚು
pH ರಸವಾರ	<6.5	6.5-7.5	>7.5

Salinity Classes

Parameter	Low/ಕಡಿಮೆ (C ₁)	Medium/ಮಧ್ಯಮ (C ₂)	High/ಹೆಚ್ಚು (C ₃)	Very High/ಅತಿ ಹೆಚ್ಚು (C ₄)
EC(dS/M) ವಿದ್ಯುತ್ ವಾಹಕತ್ವ	<0.25	0.25-0.75	0.75-2.25	>2.25
Chlorides(Cl)(ppm)/ಕ್ಲೋರೈಡ್	<2-5	5-12	12-20	>20

Sodicity Classes

Parameter	Low/ ಕಡಿಮೆ (S ₁)	Medium/ಮಧ್ಯಮ (S ₂)	High/ಹೆಚ್ಚು (S ₃)	Very High/ ಅತಿ ಹೆಚ್ಚು (S ₄)
SAR(Sodium adsorption ratio) ಸೋಡಿಯಂ ಹೊರಹೀರುವಿಕೆ ಅನುಪಾತ	<10	10-18	18-26	>26

Bicarbonate (HCO₃) Classes

Parameter	Low (RSC ₁) / ಕಡಿಮೆ	Medium (RSC ₂) /ಮಧ್ಯಮ	High (RSC ₃) /ಹೆಚ್ಚು
RSC(Residual Sodium carbonate) ಉಳಿಕೆಯ ಸೋಡಿಯಂ ಕಾರ್ಬೋನೇಟ್	<1.25	1.25-2.50	>2.50

[Signature]
Professor and Head
Department of Soil Science and Agricultural Chemistry
College of Agriculture, GKVK, Bangalore